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SOUTHERN COMPANY
Energy to Serve Your World℠

June 13, 2002

Docket Nos. 50-424

LCV-1628

U. S. Nuclear Regulatory Commission
ATTN: Document Control Desk
Washington, D. C. 20555

VOGTLE ELECTRIC GENERATING PLANT
LICENSEE EVENT REPORT 1-2002-03
LOSS OF MAIN FEEDWATER LEADS TO
UNPLANNED ESF ACTUATION AND MANUAL REACTOR TRIP

Ladies and Gentleman:

In accordance with the requirements of 10 CFR 50.73, Southern Nuclear Operating Company hereby submits a Vogtle Electric Generating Plant licensee event report for a condition that occurred on Unit 1 on April 20, 2002.

Please contact this office if you have any questions.

Sincerely,

J. B. Beasley, Jr.

JBB/BHW

Enclosure: LER 1-2002-03

cc: Southern Nuclear Operating Company
Mr. J. T. Gasser
Mr. M. Sheibani
SNC Document Management

U. S. Nuclear Regulatory Commission
Mr. L. A. Reyes, Regional Administrator
Mr. F. Rinaldi, Project Manager, NRR
Mr. J. Zeiler, Senior Resident Inspector, Vogtle

IE22

NRC FORM 366 (7-2001) U.S. NUCLEAR REGULATORY COMMISSION

APPROVED BY OMB NO. 3150-0104 EXPIRES 7/31/2004

Estimated burden per response to comply with this mandatory information collection request: 50 hrs. Reported lessons learned are incorporated into the licensing process and fed back to industry. Send comments regarding burden estimate to the Records Management Branch (T-6 E6), U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001, or by internet e-mail to bjs1@nrc.gov, and to the Desk Officer, Office of Information and Regulatory Affairs, NEOB-10202 (3150-0104), Office of Management and Budget, Washington, DC 20503. If a means used to impose information collection does not display a currently valid OMB control number, the NRC may not conduct or sponsor, and a person is not required to respond to,

LICENSEE EVENT REPORT (LER)

(See reverse for required number of digits/characters for each block)

1. FACILITY NAME	2. DOCKET NUMBER	3. PAGE
Vogtle Electric Generating Plant - Unit 1	05000-424	1 OF 4

4. TITLE

LOSS OF MAIN FEEDWATER LEADS TO UNPLANNED ESF ACTUATION AND MANUAL REACTOR TRIP

5. EVENT DATE			6. LER NUMBER			7. REPORT DATE			8. OTHER FACILITIES INVOLVED	
MONTH	DAY	YEAR	YEAR	SEQUENTIAL NUMBER	REVISION NUMBER	MONTH	DAY	YEAR	FACILITY NAME	DOCKET NUMBER(S)
										05000
04	20	2002	2002	003	00				FACILITY NAME	DOCKET NUMBER(S) 05000

9. OPERATING MODE	1
10. POWER LEVEL	30

11. THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR §: (Check all that apply)

20.2201(b)	20.2203(a)(3)(ii)	50.73(a)(2)(ii)(B)	50.73(a)(2)(ix)(A)
20.2201(d)	20.2203(a)(4)	50.73(a)(2)(iii)	50.73(a)(2)(x)
20.2203(a)(1)	50.36(c)(1)(i)(A)	X 50.73(a)(2)(iv)(A)	73.71(a)(4)
20.2203(a)(2)(i)	50.36(c)(1)(ii)(A)	50.73(a)(2)(v)(A)	73.71(a)(5)
20-2203(a)(2)(ii)	50.36(c)(2)	50.73(a)(2)(v)(B)	OTHER
20-2203(a)(2)(iii)	50.46(a)(3)(ii)	50.73(a)(2)(v)(C)	Specify in Abstract below or in NRC Form 366A
20.2203(a)(2)(iv)	50.73(a)(2)(i)(A)	50.73(a)(2)(v)(D)	
20.2203(a)(2)(v)	50.73(a)(2)(i)(B)	50.73(a)(2)(vii)	
20.2203(a)(2)(vi)	50.73(a)(2)(i)(C)	50.73(a)(2)(viii)(A)	
20.2203(a)(3)(i)	50.73(a)(2)(ii)(A)	50.73(a)(2)(viii)(B)	

12. LICENSEE CONTACT FOR THIS LER

NAME	TELEPHONE NUMBER (Include Area Code)
Mehdi Sheibani, Nuclear Safety and Compliance	(706) 826-3209

13. COMPLETE ONE LINE FOR EACH COMPONENT FAILURE DESCRIBED IN THIS REPORT

CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO EPIX	CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO EPIX

14. SUPPLEMENTAL REPORT EXPECTED		15. EXPECTED SUBMISSION DATE	MONTH	DAY	YEAR
YES (If yes, complete EXPECTED SUBMISSION DATE)	X NO				

16. ABSTRACT (Limit to 1400 spaces, i.e., approximately 15 single-spaced typewritten lines)

On April 20, 2002, power ascension was in progress following a refueling outage. At 0500 EDT, a control room alarm was received due to the water level decreasing in steam generator (SG) #4. The reactor operator (RO) increased the speed of the A main feedwater pump (MFP). Almost simultaneously, the balance-of-plant operator recognized that the A MFP mini-flow valve was open and an operator in the turbine building was directed to shut it. Water levels in all four SGs began to rise rapidly, and operators lowered the MFP speed and throttled the main feedwater regulating valves. However, at 0509 EDT, SG #4 reached its high level setpoint which led to a turbine trip, a main feedwater isolation, and an auxiliary feedwater system actuation. The shift superintendent ordered a manual reactor trip, which occurred at 0510 EDT.

The causes of this event are: the failure to increase MFP speed in normal increments to correspond with increased water demand as reactor power was rising, and an inadequate response to the SG water levels when it was recognized that levels had dropped too low. The operating crew involved has been counseled on the expectations of managing evolutions and performed just-in-time training prior to assuming the next shift.

A. REQUIREMENT FOR REPORT

This event is reportable per 10 CFR 50.73 (a)(2)(iv) because unplanned engineered safety feature and unplanned reactor protection system actuations occurred.

B. UNIT STATUS AT TIME OF EVENT

At the time of this event, Unit 1 was in power ascension in Mode 1 (power operations) at 30 percent of rated thermal power. Personnel were making preparations to synchronize the generator to the grid. Other than that described herein, there was no inoperable equipment that contributed to the occurrence of this event.

C. DESCRIPTION OF EVENT

On April 20, 2002, power ascension was in progress following a refueling outage. At approximately 0450 EDT, the operator designated as the steam generator water level controller (SGWLC) was sent from the control room to investigate a main generator alarm. At 0500 EDT, a control room alarm was received due to water level lowering in steam generator (SG) #4. The reactor operator (RO) increased the speed of the A main feedwater pump (MFP). Almost simultaneously, the balance-of-plant operator (BOP) recognized that the A MFP mini-flow valve was open and an operator in the turbine building was directed to shut it. These combined actions caused water levels in all four SGs to rise rapidly. Both the RO and the SGWLC (who had returned to the control room) attempted to control the water levels by lowering the MFP speed and throttling the main feedwater regulating valves. However, at 0509 EDT, SG #4 reached its high level setpoint which led to a turbine trip, a main feedwater isolation, and an auxiliary feedwater (AFW) system actuation. The shift superintendent ordered a manual reactor trip, which occurred at 0510 EDT, and the unit was stabilized in Mode 3 (hot standby).

D. CAUSE OF EVENT

The causes of this event were:

1) The initial lowering of the SG water levels was caused by failure of the operating crew to increase the MFP speed at normal increments to correspond with increased water demand as reactor power was rising.

2) Inadequate coordination in response to the lowered SG water levels. Specifically, closing the MFP mini-flow valve without fully considering the impact on the plant.

Finally, there were no characteristics of the work location that contributed to the occurrence of these errors by the licensed operators involved.

E. ANALYSIS OF EVENT

The main feedwater system isolated and the auxiliary feedwater system actuated as designed following the receipt of the SG high water level signal. With the main feedwater system isolated and reactor power at 30%, control room personnel acted appropriately to manually trip the reactor and prevent a challenge to the automatic trip actuation circuitry. Based on these considerations, there was no adverse effect on plant safety or on the health and safety of the public as a result of this event.

This event does not represent a safety system functional failure.

F. CORRECTIVE ACTIONS

1) The operating crew has been counseled on the expectations of managing evolutions and performed just-in-time training prior to assuming the next shift.

2) This event will be addressed in licensed operator continuing training, emphasizing error precursors and how proper management of activities could have prevented the event. Also, skill-based tasks performed during unit startup will be reviewed, and appropriate changes made to training program(s) by September 1, 2002.

3) Appropriate procedures will be revised by October 10, 2002, to ensure proper use of the MFP mini-flow valves during unit start-ups.

G. ADDITIONAL INFORMATION

1) Failed Components:
None

2) Previous Similar Events:
There have been no previous similar events in the last two years.

3) Energy Industry Identification System Code:
Main Feedwater System – SJ
Auxiliary Feedwater System – BA
Main Steam System - SB
Reactor Coolant System - AB